IN THE CLAIMS:

Please cancel all previously submitted claims, without prejudice, and add the following new claims:

16. A breathing aid device, comprising:

a patient connection;

an inspiratory branch in fluid communication with said patient connection, said inspiratory branch including an inspiration valve;

an expiratory branch in fluid communication with said patient connection and said inspiratory branch;

means for controlling expiration in fluid communication with said expiratory branch, said means for controlling expiration including an expiration valve;

means for detecting pressure operatively connected to said inspiratory branch;

means for ventilating in fluid communication with said inspiratory branch, said means for ventilating including means for supplying a breathable gas through said inspiratory branch at an adjustable pressure, said means for ventilating further including means for controlling the inspiration valve and the expiration valve, said means for ventilating further including pressure control means for comparing a pressure command to a pressure signal provided by said means for detecting pressure and for adjusting the pressure of the means for supplying; and

means for regulating a patient's breathed volume, said means for regulating including means for controlling volume and means for measuring volume, wherein the means for controlling volume provides the pressure command to the pressure control means, and wherein the means for measuring volume provides a signal indicative of a measured volume of breathed gas to the means for controlling volume.

17. The device of claim 16, wherein said patient connection includes a facial mask.

18. The device of claim 16, wherein said patient connection includes a nasal mask.

19. The device of claim 16, wherein the means for supplying breathable gas includes an adjustable speed motor-turbine set.

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20. The device of claim 16, wherein the means for controlling volume includes an input for a minimum inspired volume per cycle, an input for a minimum inspiratory pressure command, and an input for a maximum inspiratory pressure command, wherein the means for controlling volume compares the measured volume from the means for measuring volume with the minimum inspired volume per cycle and adjusts the pressure command in the direction tending to bring the signal from the means for measuring volume toward the minimum inspired volume per cycle, and wherein the means for controlling volume maintains the pressure command within the range of the minimum inspiratory pressure command and the maximum inspiratory pressure command.

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21. A breathing aid device, comprising:

a patient connection;

an inspiratory branch in fluid communication with said patient connection, said inspiratory branch including an inspiration valve;

an expiratory branch in fluid communication with said patient connection and said inspiratory branch;

an expiration device in fluid communication with said expiratory branch, said expiratory branch including an expiration valve;

a pressure detector operatively connected to said inspiratory branch;

a ventilation unit in fluid communication with said inspiratory branch, said ventilation unit including a source of breathable gas at an adjustable pressure, said ventilation unit further including a valve controller for opening and closing the inspiration valve and the expiration valve, said ventilation unit further including a pressure controller for comparing a pressure detected by said pressure detector to a pressure command and for adjusting the pressure of the source of breathable gas; and

a regulator for regulating a patient's breathed volume, said regulator including a control unit and a measuring unit, wherein the control unit provides the pressure command to said ventilation unit, and wherein the measuring unit provides a signal indicative of a measured volume of breathed gas to the control unit.

22. The device of claim 21, wherein the source of breathable gas at an adjustable pressure includes an adjustable speed motor-turbine set.

23. The device of claim 21, wherein the control unit includes an input for a minimum inspired volume per cycle, an input for a minimum inspiratory pressure command, and an input for a maximum inspiratory pressure command, wherein the control unit compares the measured volume from the measuring unit with the minimum inspired volume per cycle and adjusts the pressure command in the direction tending to bring the signal from the measuring unit toward the minimum inspired volume per cycle, and wherein the control unit maintains the pressure command within the range of the minimum inspiratory pressure command and the maximum inspiratory pressure command.

24. A breathing aid device, comprising:

a patient connection;

an inspiratory branch in fluid communication with said patient connection, said inspiratory branch including an inspiration valve;

an expiratory branch in fluid communication with said patient connection and said inspiratory branch, said expiratory branch including an expiration valve;

a pressure detector operatively connected to said inspiratory branch;

a source of breathable gas at an adjustable pressure in fluid communication with said inspiratory branch;

a valve controller for opening and closing the inspiration valve and the expiration valve;

a pressure controller for comparing a pressure detected by said pressure detector to a pressure command and for adjusting the pressure of the source of breathable gas;

a control unit for providing the pressure command to said pressure controller; and

a measuring unit for providing a signal to the control unit indicative of a measured volume of breathable gas detected per breathing cycle to the patient connection.

25. The device of claim 24, wherein said control unit includes an input for a minimum inspired volume per cycle, an input for a minimum inspiratory pressure command, and an input for a maximum inspiratory pressure command, wherein said control unit compares the measured volume from said measuring unit with the minimum inspired volume per cycle and adjusts the pressure command in the direction tending to bring the signal from said measuring unit toward the minimum inspired volume per cycle, and wherein the control unit maintains the pressure command within the range of the minimum inspiratory pressure command and the maximum inspiratory pressure command.